

IN THE CLAIMS:

Please amend Claims 1, 6, 7 and 16 as follows:

1. (Currently Amended) A reaction solution for use in image recording in conjunction with an ink containing a coloring material in a dissolved or dispersed state, the reaction solution destabilizing the dissolved or dispersed state of the coloring material in the ink ~~in~~ by contact with the ink, the reaction solution ~~comprising~~ comprising:

a polyvalent metal ~~ion~~; ion;

an organic ~~solvent~~; solvent;

a ~~buffer~~; buffer; and

a metal ion derived from the buffer, the reaction solution has a pH of 2 or higher, and has a buffering action for variations in pH, wherein the buffering action means ~~it can maintain~~ maintaining pH variation within the range of 0.5 before and after the addition of 1.0 ml of a 0.1 N aqueous lithium hydroxide solution to 50 ml of the reaction solution.

2. (Original) The reaction solution according to claim 1, wherein the amount of the polyvalent metal ion is from 0.01% to 10% inclusive by weight based on the total amount of the reaction solution.

3. (Original) The reaction solution according to claim 1, wherein the reaction solution further contains a strong acid ion.

4. (Cancelled)

5. (Original) The reaction solution according to claim 1, wherein the pH of the reaction solution is 7 or lower.

6. (Currently Amended) A set of an ink and a reaction solution ~~comprising~~
comprising:

the an ink containing a coloring material in a dissolved or dispersed state,
and ~~the a~~ reaction solution capable of destabilizing the dissolved or dispersed state of the
coloring material in the ink ~~in~~ by contact with the ink,

wherein the reaction solution contains a polyvalent metal ion, an organic
solvent, a buffer, and a metal ion derived from the buffer, the reaction solution has a pH of
2 or higher, and has a buffering action for variations in pH, wherein the buffering action
means ~~it can maintain~~ maintaining pH variation within the range of 0.5 before and after the
addition of 1.0 ml of a 0.1 N aqueous lithium hydroxide solution to 50 ml of the reaction
solution.

7. (Currently Amended) An inkjet recording apparatus ~~comprising~~
comprising:

a recording head for discharging an ink containing a coloring material in a
dissolved or dispersed ~~state,~~ state;

an ink cartridge having an ink storage unit containing the ~~ink,~~ ink;

ink supply means for supplying the ink from the ink cartridge to the recording ~~head~~, head; and

means for supplying a reaction solution capable of destabilizing the dissolved or dispersed state of the coloring material in the ink ~~in~~ by contact with the ink,

wherein the reaction solution contains a polyvalent metal ion, an organic solvent, a buffer, and a metal ion derived from the buffer, the reaction solution has a pH of 2 or higher, and has a buffering action for variations in pH, wherein the buffering action means ~~it can maintain~~ maintaining pH variation within the range of 0.5 before and after the addition of 1.0 ml of a 0.1 N aqueous lithium hydroxide solution to 50 ml of the reaction solution.

8. (Original) The inkjet recording apparatus according to claim 7, wherein the amount of the polyvalent metal ion is from 0.01% to 10% inclusive by weight based on the total amount of the reaction solution.

9. (Original) The inkjet recording apparatus according to claim 7, wherein the reaction solution further contains a strong acid ion.

10. (Cancelled)

11. (Original) The inkjet recording apparatus according to claim 7, wherein the pH of the reaction solution is 7 or lower.

12. (Original) The inkjet recording apparatus according to claim 7, wherein the pH of the reaction solution is lower than the pH of the ink.

13. (Original) The inkjet recording apparatus according to claim 7, wherein the viscosity of the reaction solution is greater than the viscosity of the ink.

14. (Original) The inkjet recording apparatus according to claim 7, comprising a coating roller for coating the reaction solution on a recording medium.

15. (Original) The inkjet recording apparatus according to claim 14, wherein the amount of the reaction solution applied on the recording medium is from 0.5 g/m² to 10 g/m² inclusive.

16. (Currently Amended) An image recording method ~~comprising~~
comprising:

a step of coating a recording medium with a reaction solution capable of destabilizing the dissolved or dispersed state of a coloring material in an ink ~~in~~ by contact with the ink containing the coloring material in a dissolved or dispersed ~~state, state;~~ and

a step of coating the ink on the recording medium by the inkjet method,

wherein the reaction solution contains a polyvalent metal ion, an organic solvent, a buffer, and a metal ion derived from the buffer, the reaction solution has a pH of 2 or higher, and has a buffering action for variations in pH, wherein the buffering action means ~~it can maintain~~ maintaining pH variation within the range of 0.5 before and after the

addition of 1.0 ml of a 0.1 N aqueous lithium hydroxide solution to 50 ml of the reaction solution.

17. (Original) The image recording method according to claim 16, wherein the amount of the polyvalent metal ion is from 0.01% to 10% inclusive by weight based on the total amount of the reaction solution.

18. (Original) The image recording method according to claim 16, wherein the reaction solution further contains a strong acid ion.

19. (Cancelled)

20. (Original) The image recording method according to claim 16, wherein the pH of the reaction solution is 7 or lower.

21. (Original) The image recording method according to claim 16, wherein the pH of the reaction solution is lower than the pH of the ink.

22. (Original) The image recording method according to claim 16, wherein the viscosity of the reaction solution is greater than the viscosity of the ink.

23. (Original) The image recording method according to claim 16, wherein coating of the reaction solution on the recording medium is carried out by a coating roller.

24. (Original) The image recording method according to claim 23, wherein the amount of the reaction solution applied on the recording medium is from 0.5 g/m² to 10 g/m² inclusive.